

\*\* MSDVIEW HEADER INDEX \*\*  
SODIUM HYPOCHLORITE SOLUTION (INDUSTRIAL USE)

JONES CHEMICALS

MATERIAL SAFETY DATA SHEET

Jones Chemicals, Inc.  
80 Munson Street  
LeRoy, New York 14423  
(and Principal Cities)

For information, please contact the Jones Chemicals facility in your area at (     )     -     or the Jones Chemicals Corporate Laboratory in Caledonia, New York at (716) 538-2311.

In the event of a transportation emergency, Call CHEMTREC: (800) 424-9300

SECTION I - IDENTIFICATION

TRADE NAME: Sodium Hypochlorite Solution (Industrial Use)

CHEMICAL NAME: Sodium Hypochlorite

FORMULA: NaOCl

DOT SHIPPING NAME: Hypochlorite Solution

DOT HAZARD CLASS: Corrosive Material

UN/NA NUMBER: UN 1791

DOT LABEL: Corrosive

DOT PLACARD: Corrosive

REPORTABLE QUANTITY: Sodium Hypochlorite: 100 Pounds/45.4 Kilograms

CAS NUMBER: 7681-52-9

NFPA DESIGNATION: The NFPA has not rated sodium hypochlorite.

SECTION II - HAZARDOUS INGREDIENTS

MATERIAL	% BY WEIGHT	CAS NO.
Sodium Hypochlorite	12.5 minimum	7681-52-9
Sodium Hydroxide	2.0 minimum	1310-73-2
Inert Ingredients	Balance	Not applicable

MATERIAL	OSHA PEL	ACGIH TLV
Sodium Hypochlorite	Not applicable	Not applicable
Sodium Hydroxide	2 mg/m(3) ceiling	2 mg/m(3) ceiling
Inert Ingredients	Not applicable	Not applicable

CARCINOGENICITY STATUS: NTP - No, IARC - No, OSHA - No.

(Jones Chemicals, Inc. Hypochlorite Solution, Industrial)

### SECTION III - PHYSICAL DATA

APPEARANCE: Yellow-green liquid

BOILING POINT: 219 Deg. F (104 Deg. C) for 12.5% NaOCl by wt.

FREEZING POINT: -11 Deg. F (-24 Deg. C) for 12.5% NaOCl by wt.

ODOR: Chlorine

PH: 12.5 - 13.5 s.u. @ 25 Deg. C

VISCOSITY (Cs): 2.15 @ 23 Deg. C for 12.5% NaOCl by wt.

PERCENT VOLATILE BY VOLUME: Variable water plus products of decomposition.

SOLUBILITY IN WATER: Complete

SPECIFIC GRAVITY (Water=1): 1.224 @ 20 Deg. C for 14.15% NaOCl by wt.

VAPOR DENSITY (AIR=1): Not available

VAPOR PRESSURE (mm Hg): Variable water plus products of decomposition.

### SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (Test method): Not applicable

AUTO IGNITION TEMPERATURE: Not applicable

FLAMMABLE LIMITS IN AIR (Volume %): Not applicable

EXTINGUISHING MEDIA: Flood with water or carbon dioxide (CO2)

SPECIAL FIRE FIGHTING PROCEDURES: Use National Institute of Occupational Safety & Health (NIOSH) approved respirator with acid type canister or use self-contained breathing apparatus.

Unusual fire and explosion hazards: material is a strong oxidizer. Contact with combustibles may initiate or promote combustion. Acid and heat accelerate decomposition. Decomposition products may include chlorine.

### SECTION V - HEALTH HAZARD INFORMATION

#### MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

No medical conditions are known to be aggravated by exposure.

#### ROUTES OF EXPOSURE

INHALATION: Fumes from spills are very irritating to mucous membranes. Very little hazard from properly stored solution.

SKIN CONTACT: Severe irritant, reddening of skin, skin damage.

SKIN ABSORPTION: Same as skin contact.

EYE CONTACT: Severe irritant; corrosive.

INGESTION: Causes irritation of membranes of the mouth, throat, and stomach pain and possible ulceration. LD50 (oral, rat) for 12.5% NaOCl is approximately 5 g/kg body weight.

## EFFECTS OF OVEREXPOSURE

### ACUTE OVEREXPOSURE

SWALLOWING: See "ingestion" under routes of exposure.

SKIN CONTACT: Irritant, reddening of skin, skin damage.

INHALATION: Fumes from spills are very irritating to mucous membranes.

EYE CONTACT: Extreme irritant, corrosive.

### CHRONIC OVEREXPOSURE

EYE: Can cause damage.

SKIN: Can cause damage, chemical burns.

### EMERGENCY AND FIRST AID PROCEDURES

EYES: If in eyes, flush with water for at least fifteen (15) minutes. Get medical attention.

SKIN: If on skin, wash with plenty of soap and water for at least fifteen (15) minutes. Get medical attention.

INHALATION: Remove to fresh air. Call a physician if exposure is severe.

INGESTION: If swallowed, drink large quantities of milk, or gelatin solution or, if these are not available, drink large quantities of water. Do NOT give vinegar or other acids. Do NOT induce vomiting. Get prompt medical attention.

## SECTION VI - REACTIVITY DATA

### CONDITIONS CONTRIBUTING TO INSTABILITY

Solutions are fairly stable in concentrations below 10%. Stability decreases with concentration, heat, light, exposure, decrease in pH, and contamination with heavy metals, such as nickel, cobalt, copper, and iron.

### INCOMPATIBILITY

Acids, alcohols, amines, ammonia, chlorinated isocyanurates, combustibles, cyanides, detergents, ethers, hydrocarbons, oxidizable materials, reducing agents. Corrosive to most metals.

### DECOMPOSITION PRODUCTS

Hypochlorous Acid (HOCl), chlorine, hydrochloric acid. Composition depends upon temperature and decrease in pH. Additional decomposition products, which depend upon pH, temperature and time, are sodium chloride, sodium chlorate and oxygen.

### CONDITIONS CONTRIBUTING TO HAZARDOUS POLYMERIZATION

Will not occur.

## SECTION VII - SPILL OR LEAK PROCEDURES

### STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Cleanup personnel must wear proper protective equipment (See Section VIII). Contain in diked area. Neutralize with sodium bisulfite or ferrous salt solutions. Place neutralized material in DOT specification approved

container(s). Flush area with large amounts of water. Comply with all Federal, State and Local reporting requirements.

#### WASTE DISPOSAL

Contact Federal, State, County, and Local environmental regulators for guidance regarding proper disposal.

### SECTION VIII - SPECIAL PROTECTION INFORMATION

#### VENTILATION REQUIREMENTS

Local exhaust is recommended.

#### SPECIFIC PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY:** Use National Institute of Occupational Safety and Health (NIOSH) or Mine Safety and Health Administration (MSHA) approved respirator appropriate for this product when permissible exposure limits are exceeded.

**EYES:** Use chemical goggles and face shield.

**GLOVES:** Use rubber or neoprene gloves.

**OTHER:** Use rubber splash apron and rubber boots. Safety shower and eye wash fountain should be located nearby.

### SECTION IX - SPECIAL PRECAUTIONS

#### PRECAUTIONS TO BE TAKEN IN HANDLING

**DANGER:** This product is corrosive and may cause severe skin irritation or chemical burns to broken skin. Causes eye damage. Do not get in eyes, on skin or on clothing. Wear goggles and face shield and rubber gloves when handling this product. Wash after handling. Avoid breathing vapors. Vacate poorly ventilated areas as soon as possible. Do not return until odors have dissipated.

#### PROPER STORAGE AND DISPOSAL REQUIREMENTS

Store in a cool, dry area away from direct sunlight. In case of spill, flood area with large quantities of water. Rinse empty container thoroughly with water and either return to manufacturer or discard by placing in trash collection or burying in an approved landfill. Product or rinseate that cannot be used, should be diluted with water and disposed of in a sanitary sewer. Do not contaminate food, or feed by storage, disposal or cleaning of equipment. **STORE IN AN UPRIGHT POSITION.**

#### OTHER PRECAUTIONS

**STRONG OXIDIZING AGENT:** Mix only with water according to label directions. Mixing this product with gross filth such as feces, urine, etc., or with ammonia, acids, detergents or other chemicals may release hazardous gases irritating to eyes, lungs and mucous membranes.

#### ADDITIONAL REGULATORY CONCERNS

**EPA:** May not be used for disinfection or sanitization without prior approval by EPA. Repackagers must obtain EPA registration and establishment numbers.

**FIFRA:** This product is regulated under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) if used as a disinfectant or sanitizer.

**TSCA:** Included in the Toxic Substances Control Act (TSCA) Inventory Of

Chemical Substances.

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